

grated within apparatus 400. However, apparatus 400 and machine-readable tag 450 are associated with each other so that the machine-readable 450, upon receiving an excitation signal, is configured to transmit information at least identifying associated apparatus 400.

[0055] According to one embodiment, machine-readable tag 450 is a passive RF transponder and/or tag that require external energy for operation. Machine-readable tag 450 is provided with means, such as an antenna coil, for separating RF energy from received signal. The received signal may then be analyzed by a microchip and a response signal may be transmitted including, at least identification information identifying associated apparatus 400. The transmitted identification information may include information suitable for initiating establishment of a wireless communication connection with apparatus 400. Depending on the embodiment, the transmitted identification information may comprise identification information relating to either of short-range communication module 430, or long-range communication module 440 of apparatus 400. According to one embodiment, the identification information comprises at least a Bluetooth address of apparatus 400.

[0056] As the machine-readable tag 450 is physically separated from apparatus 400, it may take any physical form, such as a small detachable sticker that can be attached to some other physical object such as inside or outside furniture, wall or any kind of poster and/or leaflet made from basically any type of material, or like. Alternatively, the machine-readable tag 450 may be integrated into some other object, such as in-house or outside furniture, or wall of a building, or like depending on the embodiment.

[0057] FIG. 5 illustrates an example method 500 as a flow diagram showing operations for initiating establishment of a wireless communication link according to an example embodiment of the present invention. Method 500 starts with block 510, where an apparatus, such as apparatus 200, machine-reads a machine-readable object, such as machine-readable tag 350 or 450. Machine-reading comprises according to one embodiment transmission of one or more interrogation signals to power up the machine-readable object and receiving of information from the powered machine-readable object. Then, on block 520 the received information is processed and analyzed for example by control module 210 of apparatus 200 to determine whether the received information includes at least information identifying an apparatus associated with the read machine-readable object. According to one embodiment, the information received from the machine-readable object may further include a dedicated indication, such as a “machine-readable tag read” flag or parameter.

[0058] According to one embodiment, the information identifying the apparatus associated with the machine-readable object comprises device address, such as Bluetooth address usable in connection with Bluetooth™ communication protocol or similar Media Access Control (MAC) address usable for example in connection with Wi-Fi communication protocols, or like. Upon receiving at least the device address in block 520, apparatus, such as apparatus 200 of FIG. 1, may process the received information including the device address and identify communication protocol with which to initiate connection establishment with the device associated with the machine-readable object, such as apparatus 300 or 400 of FIG. 1.

[0059] Example data records received from a machine-readable object, such as a NFC tag according to an example

embodiment, including Bluetooth™ carrier configuration is shown on FIGS. 6A and 6B. As shown on the example data record of FIG. 6A, the data record 610 received from a machine-readable object may include an alternative carrier indication 625 included in the NFC communication record 620 portion of the data record 610. Bluetooth™ configuration record 630 portion of the data record 610 may comprise device address (BD\_ADDR) 632 of the associated device, such as apparatus 300 or 400 of FIG. 1, which is used when establishing a connection with the of the associated device. Additional information included in the Bluetooth™ configuration record 630 may include a class of device indication 634, which informs the device type of the associated device, Bluetooth™ local name 636 and Pairing parameters 638 that can be used when establishing a secure connection with the associated device, such as apparatus 300 or 400 of FIG. 1. According to an example embodiment of the present invention, similar data record can be used for the purposes of setting up a Wi-Fi connection, wherein the Bluetooth™ configuration record 630 may be replaced with Wi-Fi carrier configuration record including information, such as a Service Set Identifier (SSID) that identifies the network through which to connect with the associated device, and other related information, such as authentication and/or encryption type information, or like.

[0060] According to one embodiment, the information received from the machine-readable object may include identification information relating to several communication protocols, such as both the Bluetooth™ configuration record and the Wi-Fi carrier configuration record described above, so that the receiving apparatus may select one of the communication protocols for connecting with the wireless communication device associated with machine-readable object based on its preferences and/or needs relating to the connection establishment.

[0061] Referring back to method 500, in case it is determined in block 520 that the received information includes at least identification information of a wireless communication device associated with the machine-readable tag, such as device 300 or 400 of FIG. 1, connection establishment with the wireless communication device is initiated with an indication that associated machine-readable object has been read as shown in block 530. The received information may include, in addition to the information identifying the apparatus associated with the read machine-readable object, a code or similar indication that may be included in the connection establishment initiation to provide an additional parameter indicating that an associated machine-readable object has been read. According to one embodiment of the present invention, the code or similar indication may include further information, such as a serial number and/or a character string, which may more or less unique for the machine-readable object that can be considered as some sort of a guarantee that the specific machine-readable tag was really read by the apparatus. The apparatus receiving the additional information through machine-reading may then use this additional information as an additional “proof” during connection establishment with wireless communication device associated with the machine-readable object. By providing such information to indicate that the apparatus, such as apparatus 200 of FIG. 1, has read associated machine-readable tag, wireless communication device, such as device 300 or 400 of FIG. 1, can be sure that the apparatus initiating connection establishment is not just faking that it has read associated